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| EXAMINER |
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KARIKARI, KWASI

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2617

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09/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/525,995 | Applicant(s) DILLINGER ET AL. | |
| | Examiner Kwasi Karikari | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION


1. In view of the Pre-appeal filed on 06/26/2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:


Rafael Perez-Gutierrez
Supervisory Patent Examiner
Technology Center 2600
Art Unit 2617

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 14 and 24-26 are rejected under U.S.C. 102(e) as being anticipated by Virtanen (U.S 20020128017 A1), (hereinafter Virtanen).

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Regarding claim 14, Virtanen discloses a method for operating a terminal device in a radio communication system (= mobile station MS in Fig. 1), comprising:

 sending a confirmation from a confirmation unit confirming that the terminal device will be checked for proper functional integrity during operation by checking signals (= MS requests for connection and SGSN checks the identification and authentication data of subscriber profile and any maximum value defined for the QOS, see 0022-23) to be transferred via said terminal device for compliance with a least one quality criterion (= the serving node SGSN sends an acknowledgement message, offering the MS a chance to accept connection, base on QOS parameters, see Pars. 0022 and 0024); and

 authorizing operation of the terminal device in the radio communication system only upon said terminal device having received said confirmation (= SGSN offers the MS a chance to connect to the system, using the QOS parameter, see Pars. 0008 0021-24 and 0029-30).

Regarding claim 24, Virtanen discloses a radio communication system (see Fig. 1), comprising:

 a confirmation unit, including a signal generation device generating a confirmation signal (= the serving node SGSN sends an acknowledgement message, offering the MS a chance to accept connection, base on QOS parameters, see Pars. 0022 and 0024); and

a transmit device sending the confirmation signal (= the serving node SGSN sends an acknowledgement message, offering the MS a chance to accept connection, base on QOS parameters, see Pars. 0022 and 0024); and

a terminal device (= MS requests for connection and SGSN checks the identification and authentication data of subscriber profile and any maximum value defined for the QOS, see 0022-23) including a receive device receiving the confirmation signal indicating that said terminal device will be checked for proper functional integrity during operation (= the serving node SGSN sends an acknowledgement message, offering the MS a chance to accept connection, base on QOS parameters, see Pars. 0022 and 0024); and

a deactivation unit only permitting further operation of said terminal device if said receive device has received the confirmation signal (= mobile user may choose to establish connect with offered value QOS or choose not to establish connection at all; see Par. 0024; whereby the phrase "choose not to establish connection" is being associated with the "deactivation").

Regarding claim 25, Virtanen discloses a terminal device (= MS) for a radio communication system having a confirmation unit (= serving node SGSN, see Fig. 1), comprising:

a receive device receiving a confirmation signal from the confirmation unit of the communication system, indicating that that said terminal device will be checked for proper functional integrity during operation in the communication system (= the serving

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node SGSN sends an acknowledgement message, offering the MS a chance to accept connection, base on QOS parameters, see Pars. 0022 and 0024); and

a deactivation device only permitting further operation of said terminal device if said receive device has received the confirmation signal (= connection rejection or terminate connection establishment, see Pars. 0008, 0024 and 0029-30).

Regarding claim 26, Virtanen discloses a confirmation unit (=serving node SGSN) for a radio communication system having at least one terminal device (= MS), comprising:

a device generating a confirmation signal, from which it can be inferred that the at least one terminal device will be checked for proper functional integrity during operation in the communication system (= the serving node SGSN sends an acknowledgement message, offering the MS a chance to accept connection, base on QOS parameters, see Pars. 0022 and 0024);and

a transmit device sending the confirmation signal to the terminal device (= the serving node SGSN sends an acknowledgement message, offering the MS a chance to accept connection, base on QOS parameters, see Pars. 0022 and 0024).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

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ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 15-17 are rejected under U.S.C. 103(a) as being unpatentable over Virtanen in view of Leung (U.S. 6,760,444), (hereinafter Leung).

Regarding claim 15, as recited in claim 14, Virtanen discloses the method, wherein said authorizing operation of the terminal device in the communication system includes sending a confirmation signal to the terminal device (= the serving node SGSN sends an acknowledgement message, offering the MS a chance to accept connection, base on QOS parameters, see Pars. 0022 and 0024); but fails to teach "wherein said method further comprises responding to receipt of the confirmation signal by the terminal device being checked during operation".

Leung teaches wherein said method further comprises "responding to receipt of the confirmation signal" (= Home Agent send registration reply and mobile node may authenticate registration reply, see col. 8, lines 4-12 and Fig. 7, step 722).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Leung into the system of Virtanen for the benefit of achieving a system that have centralized databases management that store security-associations

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for mobile nodes supported by multiple Home Agents as well as perform Mobile IP authentication of the mobile nodes (see Leung; col. 4, lines 57-62).

Regarding claim 16, as recited in claim 15, Virtanen further discloses that the method further comprising:

 sending a request signal from the terminal device to a confirmation unit prior to said authorizing operation of the terminal device in the communication system (= MS requests for connection and SGSN checks the identification and authentication data of subscriber profile and any maximum value defined for the QOS, see 0021-23), and

 initiating checking of the terminal device by the confirmation unit in response to the request signal (= MS requests for connection and SGSN checks the identification and authentication data of subscriber profile and any maximum value defined for the QOS, see 0022-23), and

 wherein said sending of the confirmation signal to the terminal device is performed by the confirmation unit after said checking (= the serving node SGSN sends an acknowledgement message, offering the MS a chance to accept connection, base on QOS parameters, see Pars. 0022-0024).

Regarding claim 17, as recited in claim 16, Virtanen further discloses that the method, further comprising previously storing an address of the confirmation unit in the terminal device and in a large number of terminal devices at least in the communication system, and wherein said sending the request signal to the confirmation unit includes the

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terminal device using the address of the confirmation unit stored previously in the terminal device (= mobile user sends a GPRS attach message to the GPRS network, see Pars. 0020-21; whereby it is inherent for the mobile user to include the address of the GPRS in the data service request message).

4. Claims 18 and 19 are rejected under U.S.C. 103(a) as being unpatentable over Virtanen in view of Leung and further in view of Namba (U.S. 6,170,006), (hereinafter Namba).

Regarding claim 18, as recited in claim 17, the combination of Virtanen and Lueng fails to teach the sending of the request signal by the terminal device only occurs after a predefined period of time has elapsed and the terminal device has not automatically received the confirmation signal.

Namba teaches that data copying process (which correspond to “sending of the request signal”) does not occur when a response to a notification does not arrive after a lapse of a predetermined time from transmission of the notification of a request for copying permission (which correspond to “registering”) (see col. 3, lines 32-41).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Namba into the system of Virtanen and Lueng for the benefit of achieving a system where information processing is synchronize with a predetermined time lapse, in order to provide an effective information distribution and authentication system.

Regarding claim 19, as recited in claim 18, the combination of Virtanen and Namba fail to disclose the method, wherein a plurality of devices are capable of performing said checking of the terminal device for proper functional integrity during operation and wherein said method further comprises determining, prior to said checking, which of the devices is performing said checking of the terminal device.

Leung's teachings of servers (i.e., "the plurality of servers") that contain security associations of the mobile node 702 and the determination of which server handles security association (i.e., "determining, prior to said checking, which of the devices is performing said checking") for mobile node 702 (see col. 7, lines 10-50); meets the claimed limitations of "a plurality of devices are capable of performing said checking of the terminal device for proper functional integrity during operation and wherein said method further comprises determining, prior to said checking, which of the devices is performing said checking of the terminal device".

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Leung into the system of Virtanen and Namba for the benefit of achieving a system that have centralized databases management that store security-associations for mobile nodes supported by multiple Home Agents as well as perform Mobile IP authentication of the mobile nodes (see Leung; col. 4, lines 57-62).

5. Claims 20-23 are rejected under U.S.C. 103(a) as being unpatentable over Virtanen in view of Leung and further in view of Namba and further in view of Letsinger (U.S. 20030236991 A1), (hereinafter Letsinger).

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Regarding claim 20, as recited in claim 19, the combination of Virtanen, Lueng and Namba fails to disclose that said determining of which device is performing said checking includes locating one of the devices in closest possible proximity to the terminal device.

Letsinger teaches that the communication channel 205 is designed so that the authentication device 202 is either physically touching or place in a very close proximity to the communication device 201 (see Pars. 0028 and 0029 and Fig. 2, item 203); whereby the device performing the said checking corresponds item 203.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Letsinger into the system of Virtanen, Lueng and Namba for the benefit of achieving a secured communication system where devices are positioned in a close proximity to ensure a successful transfer information and to prevent an interfering signal or spurious signal and further preventing an interception of sensitive device ID (Letsinger; see Pars. 0028 and 0032).

Regarding claim 21, as recited in claim 20, the combination of Virtanen, Lueng and Namba fails to disclose the method, wherein said checking method further comprises delivering software needed for performing said checking to the terminal device via a wireless interface.

Letsinger further teaches that the controller 306 and the authenticator 307 can be any hardware, firmware and/or software that resides within communication device 301 (which corresponds to the "terminal device"); and device 301 can transmit and receive

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data over the network 303 (which corresponds to the “wireless interface”), (see Par. 0033 and Fig. 3).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Letsinger into the system of Virtanen, Lueng and Namba for the benefit of achieving a secured communication system where devices are positioned in a close proximity to ensure a successful transfer information and to prevent an interfering signal or spurious signal and further preventing an interception of sensitive device ID (Letsinger; see Pars. 0028 and 0032).

Regarding claim 22, as recited in claim 21, the combination of Virtanen, Lueng and Namba fails to teach that the quality criterion value dependent on where the terminal device is situated within the radio communication system.

Letsinger, however teaches that a close proximity restriction (which corresponds to the “terminal device is situated within the radio communication system”) guarantees the supply of proper authentication information in the system (see Par. 0028); i.e., the authentication information in the system would not be interfered due to the close proximity of devices in the system.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Letsinger into the system of Virtanen, Lueng and Namba for the benefit of achieving a secured communication system where devices are positioned in a close proximity to ensure a successful transfer information and to prevent an

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interfering signal or spurious signal and further preventing an interception of sensitive device ID (Letsinger; see Pars. 0028 and 0032).

Regarding claim 23, as recited in claim 22, Virtanen further discloses that the method further comprising refusing operation of the terminal device in the communication system after said authorizing of the terminal device for operation only if said checking of the terminal device has yielded one of a predetermined number of errors and an error exceeding a threshold value (= establishment of connection is rejected in respond to the fact that the requested quality of service parameters exceeds the maximum value, see Pars. 0008 and 0024).

Conclusion

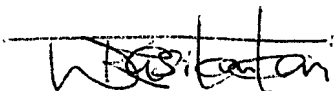
6. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is


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571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Rafael Pérez-Gutiérrez* can be reached on 571-272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8566. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kwasi Karikari
Patent Examiner.
09/07/2007



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9/17/07